

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

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1. In a thermophotovoltaic device (10) having an energy source (12) compatible with thermophotovoltaic cells and thermophotovoltaic cells (14), the improvement comprising:

a filter (16) adapted to filter out long wavelength energy positioned between the energy source and the thermophotovoltaic cells, the filter (16) having dual walls (30 & 32)

10 with a low conductivity space (34) that is evacuated to place it under vacuum between the walls which is adapted to break the convection heat transfer path from the energy source (12) to the thermophotovoltaic cells (14).

2. The thermovoltaic device as defined in Claim 1, further including a dielectric filter 15 (36) adapted to filter mid-wavelength energy positioned between the energy source (12) and the thermophotovoltaic cells (14).

3. The thermovoltaic device as defined in Claim 1, wherein the dual walls (30 & 32) are of heat resistant glass.

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4. The thermovoltaic device as defined in Claim 4, wherein the heat resistant glass is quartz.

5. The thermovoltaic device as defined in Claim 4, dual walls (30 & 32) are arranged as concentric tubes.

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6. The thermovoltaic device as defined in Claim 1, the energy source being a burner with an emitter (22, 24, 26, 28).

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